

ABSTRACT OF THE DISCLOSURE

The present invention provides a superconductivity magnet apparatus for generating a uniform magnetic field suitable for NMR applications. The superconductivity magnet apparatus has an access port for allowing an access
5 to the center of the magnetic field from an external position separated away from the center in a direction other than the axial direction of a split-type superconductivity electromagnet employed in the magnet apparatus. In the superconductivity magnet apparatus, a gap exists between first and second superconductivity coil blocks facing each other to form the split-type
10 superconductivity electromagnet. To put it in detail, the access port allows an access to a measurement space at the center of the magnet by way of the gap. A configuration element of the magnet such as a coil bobbin is cut out for providing the access port. An area including a deficiency portion caused by the cutout portion or the like is filled up with a material having a relative
15 magnetic permeability in the range 1.000 to 1.002 as an axis-symmetrical area. By using the material with a relative magnetic permeability in the range 1.000 to 1.002, the strength of an erroneously generated magnetic field can be reduced so that a magnet producing a uniform magnetic field can be provided.